

## Environmental Protection Agency

## §91.1309

except in cases involving fraud. Engine families participating in a negative trade may be subject to recall under subpart I of this part.

### §91.1307 Credit calculation.

For each participating engine family, emission credits (positive or negative) are to be calculated according to the following equation and rounded, in ac-

cordance with ASTM E29-93a, to the nearest gram. ASTM E29-93a has been incorporated by reference. See §91.6. Consistent units are to be used throughout the equation. The following equation is used to determine the credit status for an engine family whether generating positive or negative in-use emission credits:

$$\sum_{t=1}^{\text{max useful life}} \frac{S(t) \times \text{sales} \times (\text{FEL} - \text{CL}) \times \text{Power} \times \text{AF} \times 0.207 \times \mu_{\text{use}}}{1.03^t}$$

Where:

S(t)=cumulative fraction survived at time t;  
 $\mu_{\text{life}}$ =average useful life in years, specific to the power rating and the application as given below.

Engine type	$(\mu_{\text{life}})$
Outboard	$41.27 \times \left( \frac{\text{Power}}{0.746} \right)^{-0.204}$
Personal Watercraft	10

Power=the average power of an engine family in kW (sales weighted). The power of each configuration is the rated output in kilowatts as determined by SAE J1228. This procedure has been incorporated by reference. See §91.6.

t=time in model years

max useful life=maximum useful life specific to the power rating and the application;

max useful life =  $2\mu_{\text{life}}$

sales = the number of eligible sales tracked to the point of first retail sale in the U.S. for the given engine family during the model year.

FEL=the family emission limit for the engine family in grams per kilowatt hour.

CL=compliance level of the in-use testing in g/kW-hr.

$\mu_{\text{use}}$ =mean use in hours per year. For outboard engines,  $\mu_{\text{use}}$ =34.8 hrs /yr. For personal watercraft,  $\mu_{\text{use}}$ =77.3 hrs/yr;

AF=adjustment factor for the number of tests conducted

No. eng. tested .....	2*, 4	6	8	10
Adjustment factor .....	.5	.75	.9	1

\* Small volume manufacturer

### §91.1308 Maintenance of records.

(a) Any manufacturer that is participating in the in-use credit program set forth in this subpart shall establish, maintain, and retain the records required by §91.209 with respect to its participation in the in-use credit program.

(b) EPA may void *ab initio* a certificate of conformity for an engine family for which the manufacturer fails to retain the records required under this section or to provide such information to the Administrator upon request.

### §91.1309 Reporting requirements.

(a) Any manufacturer who participates in the in-use credit program is required to submit an end of the model year in-use testing report either within 90 days of the end of the model year in-use testing of a given model year's engine families, or at the same time as the final certification AB&T report (required under §91.210), whichever is later. The end of the model year in-use testing report must contain the required information and show the calculated credits from all the in-use testing conducted by the manufacturer for a given model year.

(b) Reports shall be submitted to: Manager, Engine Compliance Programs Group 6403-J, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

(c) A manufacturer that fails to submit a timely report as required in paragraph (a) of this section will be considered to not have participated in the in-use credit program.

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(d) If EPA or the manufacturer determines that a reporting error occurred on an end of model year report previously submitted to EPA under this subpart, or an engine family in-use testing report submitted to EPA under subpart I, the manufacturer's credits and credit calculations will be recalculated. Erroneous positive credits will be void. Erroneous negative credits may be adjusted by EPA. An update of previously submitted "point of first retail sale" information is not considered an error and no increase in the number of credits will be allowed unless an actual error occurred in the calculation of credits due to an error in the "point of first retail sale" information from the time of the original end of model year report.

### §91.1310 Notice of opportunity for hearing.

Any voiding of an engine family's certificate of conformity under §91.1308(b) of this subpart will occur only after the manufacturer concerned has been offered an opportunity for a hearing conducted in accordance with §§91.512, 91.513, 91.514 and 91.515.

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